

Abstract:

System for interferometric fit testing

(Figure 2)

A system for interferometric fit testing of a specimen having an aspherical surface in reflection, the specimen being a segment (2) (footprint) of a rotationally symmetrical basic body (1) (parent), comprises an interferometer (3) and a diffractive optical element (DOE) (5). An optical axis of the interferometer (3) in the beam direction behind the diffractive optical element (5) and an axis of rotation of the basic body (1) form an angle that differs from zero. The diffractive optical element (5) is designed in such a way that the rays produced by the interferometer (3) and falling into the diffractive optical element (5) strike the specimen (2) perpendicularly and from there run back in themselves.